

REMARKS/ARGUMENTS

The rejections presented in the Office Action dated October 13, 2006 (hereinafter Office Action) have been considered. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claim 1 has been amended. All portions added to the claim were taken from the claim preamble. Accordingly, no new matter has been added, and the scope of the claim remains unchanged. The amendment to claim 1 was done to enhance the understanding of this claim and was not done to narrow the scope of the claim or for any reason necessitated by the prior art. Thus, the Applicant has not intended to narrow, nor has the Applicant narrowed, the scope of any pending claims by way of the amendment to claim 1.

Claims 1-20 stand rejected based on 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,850,081 to Birdsley (hereinafter “Birdsley”) in view of U.S. Patent No. 6,681,354 to Gupta (hereinafter “Gupta”) or U.S. Patent No. 7,000,148 to Kolof et al. (hereinafter “Kolof”). The Applicant respectfully traverses the rejection of these claims.

Three criteria must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. MPEP § 2142.

The Applicant’s independent claim 1 recites, among other things, “feeding the electric test signal to the device by a feeding line; measuring an electric quantity from the feeding line by a measurement unit integrated into the mobile station.” Also, the Applicant’s independent claim 11 recites, among other things, “a feeding line connected to the signal generator and the device, for feeding the electric test signal to the device.” The Applicant respectfully submits that the alternative combinations of Birdsley and Gupta, or Birdsley and Kolof do not teach or suggest at least the above limitations of independent claims 1 or 11.

Birdsley discloses generating an optical signal from a laser diode (230, 330) on, or connected to, an integrated circuit die (200, 300), outputting the optical signal from the integrated circuit die (200, 300) through a fiber optic cable (240, 340) to a tester (250, 350), where the optical signal is used to analyze the integrated circuit die (200, 300). (See Figs. 3 and 4; Col. 4, Lines 44-60). Considering that Birdsley's optical signal is sent away from the device being tested (the integrated circuit die (200, 300)) to the tester (250, 350) to be analyzed, Birdsley does not teach or suggest feeding an electric test signal to the device by a feeding line, as recited in independent claim 1. Consequently, Birdsley necessarily does not teach or suggest measuring an electronic quantity from the feeding line by a measurement unit integrated into the mobile station, as further recited in independent claim 1. Nor does Birdsley teach or suggest feeding an electric test signal to the device or a measurement unit connected to the feeding line for measuring an electric quantity from the feeding line, as recited in independent claim 11.

Although the Examiner does not rely on either of Gupta or Kolof to teach or suggest feeding an electrical test signal to the device and measuring an electric quantity from the feeding line, a review of each of these references fails to identify any such teaching or suggestion. For example, Gupta discloses a field programmable gate array for use in an integrated processing system that is capable of testing other embedded components in the integrated processing system. (Abstract). Gupta does not disclose that the integrated processing system is fed an electric test signal. Although a signal may be detected within the integrated processing system to begin running the test procedure, Gupta does not teach or suggest that this signal is fed to the integrated processing system, nor does Gupta teach or suggest that this trigger signal is a test signal, is actually measured, or does anything more than initiate the testing procedure. (Col. 2, Lines 38-45).

In addition, Kolof fails to teach or suggest the above discussed limitations missing from Birdsley. For example, Kolof discloses a program-controlled unit having a CPU, peripheral units which are connected to the CPU via an internal bus, and debug resources that can be used to trace and influence operations taking place in the program-controlled unit. (Col. 2, Lines 7-11). While Kolof's program-controlled unit appears to involve

control signals, these control signals are output from the program-controlled unit being debugged and are not fed to the program-controlled unit. (Col. 1, Lines 28-34). Moreover, although the program-controlled unit can exchange data with peripheral units, Kolof does not teach or suggest that these data exchanges include an electronic test signal being fed to the program-controlled unit or that an electronic quantity is measured from a feeding line. (Col. 2, Lines 45-54).

Therefore, the Applicant respectfully submits that neither the combination of Birdsley and Gupta nor the combination of Birdsley and Kolof teach or suggest feeding the electric test signal to the device by a feeding line and measuring an electric quantity from the feeding line by a measurement unit integrated into the mobile station, as recited in independent claim 1. Likewise, the Applicant respectfully submits that the same combinations also fail to teach or suggest a feeding line connected to the signal generator and the device, for feeding the electric test signal to the device, and a measurement unit connected to the feeding line, for measuring an electric quantity from the feeding line, as recited in independent claim 11.

Furthermore, the Applicant's independent claims 1 and 11 each recite elements concerning determining an electric response of the device to the electric test signal based on the electric quantity. The Applicant respectfully submits that neither of the combinations of Birdsley and Gupta, nor Birdsley and Kolof, teach or suggest at least this additional limitation of independent claims 1 and 11.

The Examiner states in the Office Action that "the test circuit tests the IC device and transmits the results of the test via an optical or line signal to an external receiver." (Page 2). It is unclear where the Examiner finds support for this statement, particularly because portions of Birdsley contradict the statement. For example, Birdsley recites that "[t]he optical signal is received at a testing arrangement adapted to analyze the die therefrom. The optical signal is used to analyze the die." (Abstract). In contrast to the Examiner's statement that test results are sent via the optical line, the optical line does not carry test results, as information carried on the optical line must first be analyzed (by the tester 250, 350) for test results to be generated. Therefore, because Birdsley states that "the

optical signal is used to analyze the die” (Abstract), the Applicant respectfully submits that Birdsley does not actually test an electric quantity because the optical signal of Birdsley is not an electric test signal and has no electric quantity that can be tested.

Accordingly, Birdsley does not teach or suggest determining an electric response of the device to the electric test signal based on the electric quantity, as recited in independent claims 1 and 11. The Examiner does not rely on Gupta or Kolof to teach or suggest this missing limitation and a review of the references does not find a teaching or suggestion of such a limitation such that a combination of Birdsley and Gupta or Birdsley and Kolof would establish a case of *prima facie* obviousness for either of independent claims 1 or 11.

Consequently, each of the cited combinations of references, namely Birdsley/Gupta and Birdsley/Kolof, fail to teach at least these claimed features. For at least these reasons, *prima facie* obviousness has not been established, and independent claims 1 and 11 are not rendered obvious by the cited combinations of references.

Further, the Applicant respectfully contends that the Examiner has not provided the requisite evidence of motivation to combine the teachings of Birdsley with those of Gupta and Kolof, as asserted. In the Office Action, the proffered motivation to combine the references is to “enable testing with minimum external test facility.” (Page 2). A review of the Birdsley, Gupta and Kolof references fails to identify a motivation to enable testing with minimum external test facility. In fact, it appears that at least Gupta supplies a motivation to do just the opposite by stating that “there is a need for BIST [built in self test] circuitry that occupies a minimum amount of space on an integrated circuit chip” and then disclosing a system that receives testing instructions from external memory 110. (Col. 1, Lines 56-59). Accordingly, the Examiner’s proffered motivation for the combination is not evidence of motivation to combine the teachings, but rather is a generalized statement of what is described in the Applicant’s application, and therefore made in hindsight. No evidence has been provided that a skilled artisan would have attempted to introduce the debugging methods of Kolof or the self-test method of Gupta to the teachings of Birdsley.

The Applicant respectfully submits that the identification of selected portions of each of the references does not provide the requisite motivation for their combination. This

piecemeal selection of elements is tantamount to mixing teachings out of context. Such a rejection is not permissible under § 103. *See In re Kotzab*, 217 F.3d 1365 (Fed. Cir. 2000) (proposed modification must not be made in the abstract but rather made in view of the entire teaching of the prior art).

Again, there is nothing in the references or what is in the ordinary skill in the art that would lead to combining the teachings of Birdsley/Gupta or Birdsley/Kolof as asserted – rather, the proffered motivation is made in hindsight. For at least the aforementioned reasons, the Applicant respectfully submits that a case of *prima facie* obviousness with respect to at least independent Claims 1 and 11 has not been satisfied for lack of a presentation of evidence of motivation to combine the cited references. The Applicant accordingly requests that the rejections be withdrawn.

Dependent Claims 2-10 and 12-20 depend from independent Claims 1 and 11, respectively. Each of these dependent claims also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the above-discussed combinations involving Birdsley, Gupta and Kolof. While the Applicant does not acquiesce to any particular rejections to these dependent claims, including any assertions concerning descriptive material and/or what may have been obvious to one of ordinary skill in the art, these rejections are moot in view of the remarks made in connection with independent Claims 1 and 11. These dependent claims include all of the limitations of their respective base claims and any intervening claims, and recite additional features which further distinguish these claims from the cited references. “If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.” MPEP § 2143.03; *citing In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, dependent Claims 2-10 and 12-20 are also allowable over the combinations involving Birdsley, Gupta and Kolof.

It should be noted that the Applicant does not acquiesce to the Examiner’s statements or conclusions concerning what would have been obvious to one of ordinary skill in the art, obvious design choices, common knowledge at the time of Applicant’s invention, officially noticed facts, and the like. The Applicant reserves the right to address in detail the Examiner’s characterizations, conclusions, and rejections in future prosecution.

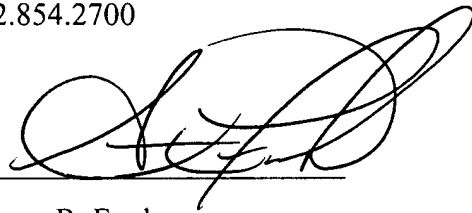
Authorization is given to charge Deposit Account No. 50-3581 (KOL.198.WUS) any necessary fees for this filing. If the Examiner believes it helpful, the undersigned attorney of record invites the Examiner to contact him at the number below to discuss any issues related to this case.

Respectfully submitted,

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Date: January 16, 2007

By: _____

A handwritten signature in black ink, appearing to read 'S. Funk', is written over a horizontal line.

Steven R. Funk
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